can see how this may be purely adaptive, the push of the hind-legs in running needing a firmer support. In *Hyomoschus* this is the case. The hind-limbs are provided with a cannon bone, while the metacarpals of the fore-feet are still free.

The number of dorso-lumbar vertebrae is less in the Axtiodactyl© than in the Perissodactyle Ungulates. Whereas the former have but nineteen, the latter have, as a rule, twenty-three such vertebrae.[1] The number of ribs varies from twelve *{Camelus, Hydropotes)* through thirteen *(Cervus, Gazella)* to fourteen in *Dicotyles, Giraffa,* etc.

The curious form of teeth known as " selenodont" is characteristic of the Artiodactyla, though only found well developed in the modern forms, and of those only in the Pecora. The more primitive forms had " bunodont [M] teeth with typically four tubercles (if we except the tritubercular and but little-known *Pantolestes)* ; and the intermediate " buno-selenodont" type characterises such groups as the Anthracotheriidae.

While the stomach of the Perissodactyles is always a simple sac, it is complicated, or shows signs of complication, in the Artiodactyles. That of the Hippopotamus is divided into two chambers; there are three in *Tragulus,* and four in the typical Ruminants such as *Cervus, Oms,* etc.

Had we to deal only with the still living genera of Artiodactyles, it would be easy to sort them into two groups on the characters of the teeth; for the Pigs and Hippopotamus are provided with tubercular molars; they are bunodont. The Deer, Camels,, Oxen, Giraffes, etc., have selenodont molars. Besides, the latter are " Ruminants," and have a more complicated stomach. The existing Chevrotains forbid a more trenchant division, since they are, as will be pointed out in due course, somewhat intermediate in structure ; the feet are more Pig-like, and the stomach is not so typically Ruminant. In any case such a division is prevented by certain extinct families which are perhaps ancestral to both. They have teeth which are not quite bunodont and not quite selenodont. These teeth have been

termed buno-selenodont or bono-lophodont.

The distribution of the living Artiodactyles presents us with some interesting facts. The vast preponderance of species occurs im fee Old World—34 in America as against over 250 species